

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 62-234379
 (43)Date of publication of application : 14.10.1987

(51)Int.CI. H01L 31/04

(21)Application number : 61-078598

(71)Applicant : KANEYAFUCHI CHEM IND CO LTD

(22)Date of filing : 04.04.1986

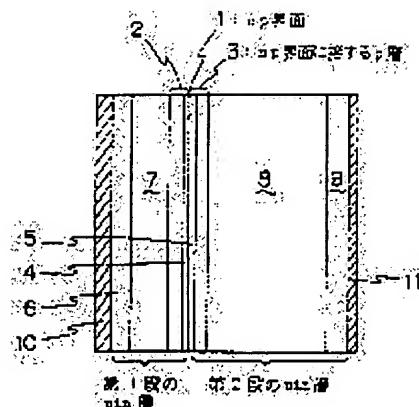
(72)Inventor : YAMAGISHI HIDEO
 YAMAGUCHI YOSHINORI
 ASAOKA KEIZO
 HIROE AKIHICO
 KONDO MASATAKA
 TSUSHIMO KAZUNAGA
 OWADA YOSHIHISA

(54) SEMICONDUCTOR DEVICE

(57)Abstract:

PURPOSE: To obtain a high-performance amorphous silicon multijunction type solar cell by a method wherein a high concentration impurity layer which has an impurity concentration high enough to accelerate carrier recombination is provided in an n-p or p-n boundary part.

CONSTITUTION: A high concentration impurity layer which has an impurity concentration high enough to accelerate carrier recombination is provided in an n-p or p-n boundary part of a multijunction type photosensor. If the n-p or p-n boundary part is composed of the partial layers of the p-type layer and/or the n-type layer, the thickness of that part is usually 10~700 Å approximately. The n-p or p-n boundary part may be the partial layers 4 and 5 of a p-type layer 3 and/or n-type layer 2 which are contacted with the n-p or p-n boundary 1 or a new layer which is doped with element other than p-type dopant or n-type dopant and is provided between the n-type layer and the p-type layer of the n-p or p-n boundary or the combination of them. With this constitution, η , Voc and FF of a solar battery can be improved.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or .]

[application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of
rejection]

[Date of requesting appeal against examiner's
decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office